

**WHAT IS CLAIMED IS:**

1. A dual platform communication controller for use with a  
2 wireless communication system, comprising:

3 a signal interpreter coupled to said wireless communication  
4 system and configured to recognize a first signal packet based on  
5 a first communication standard and a second signal packet based on  
6 a second communication standard; and

7 a traffic manager coupled to said signal interpreter and  
8 configured to provide a deterministic time-sharing between said  
9 first and second signal packets within said wireless communication  
10 system.

2. The controller as recited in Claim 1 wherein said first  
2 communication standard is configured to be IEEE 802.11.

3. The controller as recited in Claim 1 wherein said second  
2 communication standard is configured to be Bluetooth.

4. The controller as recited in Claim 1 wherein said traffic  
2 manager is configured to provide said deterministic time-sharing  
3 between said first and second signal packets based on a real-time  
4 requirement.

5. The controller as recited in Claim 1 wherein said traffic  
2 manager is configured to provide said deterministic time-sharing  
3 between said first and second signal packets based on a period of  
4 time.

6. The controller as recited in Claim 1 wherein said traffic  
2 manager is configured to provide said deterministic time-sharing  
3 between said first and second signal packets by inhibiting a  
4 transmission capability of at least one of said first and second  
5 signal packets.

7. The controller as recited in Claim 1 wherein said traffic  
2 manager is further configured to operate in a default state having  
3 a listening mode and a standby mode.

8. A method of controlling a dual platform communication for  
2 use with a wireless communication system, comprising:

3 recognizing a first signal packet based on a first  
4 communication standard and a second signal packet based on a second  
5 communication standard; and

6 providing a deterministic time-sharing between said first and  
7 second signal packets within said wireless communication system.

9. The method as recited in Claim 8 wherein said first  
2 communication standard is IEEE 802.11.

10. The method as recited in Claim 8 wherein said second  
2 communication standard is Bluetooth.

11. The method as recited in Claim 8 wherein said providing  
2 a deterministic time-sharing between said first and second signal  
3 packets is based on a real-time requirement.

12. The method as recited in Claim 8 wherein said providing  
2 said deterministic time-sharing between said first and second  
3 signal packets is based on a period of time.

13. The method as recited in Claim 8 wherein said providing  
2 said deterministic time-sharing between said first and second  
3 signal packets employs inhibiting a transmission capability of at  
4 least one of said first and second signal packets.

14. The method as recited in Claim 8 wherein said providing  
2 further provides operating in a default state having a listening  
3 mode and a standby mode.

15. A wireless communication system, comprising:

2       a first wireless network based on a first communication  
3       standard that employs a first wireless station and a first signal  
4       packet;

5       a second wireless network based on a second communication  
6       standard that employs a second wireless station and a second signal  
7       packet; and

8       a dual platform communication controller coupled to said first  
9       and second wireless networks, including:

10           a signal interpreter that recognizes said first signal  
11       packet based on said first communication standard and said  
12       second signal packet based on said second communication  
13       standard, and

14           a traffic manager, coupled to said signal interpreter,  
15       that provides a deterministic time-sharing between said first  
16       and second signal packets within said wireless communication  
17       system.

16. The system as recited in Claim 15 wherein said first

2 communication standard is IEEE 802.11.

17. The system as recited in Claim 15 wherein said second

2 communication standard is Bluetooth.

18. The system as recited in Claim 15 wherein said traffic  
2 manager provides said deterministic time-sharing between said first  
3 and second signal packets based on a real-time requirement.

19. The system as recited in Claim 15 wherein said traffic  
2 manager provides said deterministic time-sharing between said first  
3 and second signal packets based on a period of time.

20. The system as recited in Claim 15 wherein said traffic  
2 manager provides said deterministic time-sharing between said first  
3 and second signal packets by inhibiting a transmission capability  
4 of at least one of said first and second signal packets.

21. The system as recited in Claim 15 wherein said traffic  
2 manager further operates in a default state having a listening mode  
3 and a standby mode.